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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,219	08/20/2001	Tat Yin Choi		6403
7590		04/01/2005		
TAT YIN CHOI				
14281 PAUL AVE				
SARATOGA, CA 95070				
		EXAMINER		
		PHUNKULH, BOB A		
		ART UNIT		PAPER NUMBER
		2661		

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/933,219	Applicant(s) CHOI, TAT YIN	
	Examiner Bob A. Phunkulh	Art Unit 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Azizoglu et al. (US 6,430,201), hereinafter Azizoglu.

Regarding claim 1, Azizoglu discloses a communication system for use in a communication network comprising

a PDH/SDH/SONET input/output unit which inputs and outputs PDH/SDH/SONET data (OC-48 source and OC-48 line interface, see figure 1);
an Ethernet input/output unit which inputs and outputs Ethernet data (GbE line interface 10, see figure 1);

a multiplexer/demultiplexer which time division multiplexes; and demultiplexes the PDH/SDH/SONET and Ethernet data (the WDN combiner 16, see figure 1);

a transceiver unit for processing, and sending and receiving the multiplexed PDH/SDH/SONET and Ethernet data (the combined signal is sent over the optical link, not shown in figure 1; see also figure 6).

Regarding claim 2, Azizoglu discloses the line interface unit is used as the PDH/SDH/SONET input/output unit for input and output of PDH/SDH/SONET data (OC-48 line interface, see figure 1).

Regarding claim 3, Azizoglu discloses an Ethernet media access controller or Ethernet transceiver is used as the Ethernet input/output unit for input and output of Ethernet data.

Regarding claim 6, Azizoglu discloses the same or separate encoder(s)/decoder(s) are used to encode and decode PDH/SDH/SONET and Ethernet data (FEC encoder 80, see figure 6).

Regarding claim 7, Azizoglu discloses a serializer/deserializer is used to serialize and deserialize the multiplexed PDH/SDH/SONET and Ethernet data (serializer, see figure 6).

Regarding claim 8, Azizoglu discloses a transceiver is used to send and receive the multiplexed PDH/SDH/SONET and Ethernet data (see claim 1).

Regarding claim 9, a method for distinguishing between PDH/SDH/SONET and Ethernet data in a communication system comprising adding different framing bit or bits to the PDH/SDH/SONET and Ethernet data prior to multiplexing, and removing the

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framing bit or bits after demultiplexing (see col. 5 lines 18-42; see col. 4 lines 38-62 for adding the framing bit in transmitter side; and see col. 6 lines 4-17 for removing the framing bit in the receiver side).

Regarding claim 10, Azizoglu discloses a method for distinguishing between the PDH/SDH/SONET and Ethernet data in a communication system comprising inserting one or more special character(s) between the PDH/SDH/SONET and Ethernet data during multiplexing, and removing the special character(s) during demultiplexing (the special "K-character" is added to the GbE signals, co. 4 lines 38-62; see col. 5 lines 18-42; see col. 4 lines 38-62 for adding the framing bit in transmitter side; and see col. 6 lines 4-17 for removing the framing bit in the receiver side).

Regarding claim 11, Azizoglu discloses a method for distinguishing between PDH/SDH/SONET and Ethernet data in a communication system comprising encoding the PDH/SDH/SONET and Ethernet data into separate code spaces, that is, different combinations of ones and zeros (the combination of stream identifier and a framing bit are encoded in the data streams, see 5 lines 18-42).

Regarding claim 12, Azizoglu discloses the communication system of claim 1 acting as a standalone system or being incorporated into other network systems (see col. 4 lines 13-29).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azizoglu.

Regarding claims 4-5, Azizoglu discloses time division multiplexing the SONET (OC-48 signal and the GbE signals (see col. 5 lines 18-41).

Regarding claims 4-5, Aziaoglu fails to disclose the PDH/SDH/SONET and Ethernet data are time division multiplexed prior to encoding, and demultiplexed after decoding or the PDH/SDH/SONET and Ethernet data are encoded prior to time division multiplexing, and demultiplexed prior to decoding.

However, it would have been obvious to one having ordinary skill in the art at the time of invention was made to cause the Azizoglu's system to TDM the signals prior to encoding and decoding after/before demultiplexing at the receiving end for choice of design.

Conclusion

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

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Mail Stop _____
Commissioner for Patents
P. O. Box 1450
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or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

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220 20th Street South
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Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Chau Nguyen**, can be reach on **(571) 272-3126**. The fax phone number for this group is **(703) 872-9306**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bob A. Phunkulh

Bob A. Phunkulh

**BOB PHUNKULH
PRIMARY EXAMINER**

TC 2600
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March 28, 2005